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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,984	02/17/2004	Matthew Munson	AWK03-027	1332
27201	7590	12/11/2006	EXAMINER	
UNISYS CORPORATION 25725 JERONIMO ROAD, MS400 MISSION VIEJO, CA 92691			LE, DIEU-MINH T	
			ART UNIT	PAPER NUMBER
			2114	

DATE MAILED: 12/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/779,984	MUNSON, MATTHEW	
	Examiner	Art Unit	
	Dieu-Minh Le	2114	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>02/17/2004</u> | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This Office Action is response to the communication filed on 02/17/04 in application 10/779,984.

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph.

3. The disclosure is objected to because of the following informalities:

Examples of some unclear, inexact or verbose terms used in the specification are: page 2, lines 26-27; page 3, lines 1-2, 30-31; page 4, lines 30-31; page 5, line 1There are too many typo errors in the abstract, specification and claims.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 1, line 4, "detriment" is not clearly understood?

As per claim 2, line 1, "Th m thod" is not clearly understood?

As per claim 6, line 1, "wh r in" is not clearly understood?

As per claim 8, line 7, "byt s/s cond" is not clearly understood?

As per claim 9, line 1, "Th " is not clearly understood?

As per claim 13, line 1, "Th wher in" is not clearly understood? Clarification is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trotter (US. 2004/0123303) in view of Robb et al. (US. 2003/0120502 hereafter referred to as Robb).

As per claim 1:

Trotter substantially teach the invention. Trotter teaches:

- A method for locating application that are over-consuming memory resources to the detriment of other applications

sharing these memory resources, [abstract, col. 1, par.

0004-0005 and 0009] comprising the steps of:

- using application to consume a pre-determined amount of memory at a pre-determined rate [col. 3, claim 1];
- setting a memory threshold value to memory consumption [col. 3, claim 1].

Trotter does not explicitly address:

- a soaking application.

However, Trotter does disclose capability of:

- A method for managing memory resources in a shared memory system having a plurality of users and memory footprint

[abstract, col. 3, claim 1 comprising capability of:

- determining memory footprint of the system that has reached a pre-determined level [col. 3, claim 1] as well as determining which users over-consuming memory utilization [col. 1, par. 0004-0005] via setting memory threshold value to its memory consumption [col. 3, par. 0055].

In addition, Robb explicitly teaches:

- An application infrastructure platform (AIP) having an application service provider (ASP) environment including

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multiple ASP systems providing application services to customers, and a common services environment including hardware and software and management systems [abstract, col. 13, par. 0138-0139]. comprising:

- application running on demand in supporting the managing of over consuming resources such as RAM memory [col. 13, par. 0138].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to first realizing Trotter's determining memory footprint of the system that has reached a pre-determined level as well as determining which users over-consuming memory utilization via setting memory threshold value to its memory consumption as being the soaking application as claimed by Applicant. This is because Trotter's memory resource management explicitly performed the managing of memory reading, writing, monitoring, detecting, executing, and control via its threshold processes. By utilizing these capabilities, the memory within the computing memory system, more specifically the RAM, can ensure computer applications utilizing memory resources properly based upon its pre-determining set rate; second, by applying application running on demand in supporting the managing of over consuming

resources such as RAM memory as taught by Robb in conjunction with the method for managing memory resources in a shared memory system having a plurality of users and memory footprint as taught by Trotter, the memory system can enhance its operation performance, more specifically to ensuring each application within the computer system performing its data within its allocated memory in proper and efficient manner via its memory threshold control process.

This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so to improve the memory operation system availability and network/system performance therein with a mechanism to enhance the data transmission (i.e., receiving and transmitting), data debugging, data mirroring, data reliability, data displaying, and data throughput which eventually will increase its performance, such as data throughput between internal and external devices including the logical and physical block addresses from a disk controller as well as a memory controller.

As per claim 2:

Trotter further teaches:

- initiating a failover action when said memory threshold is reached so that processing is shifted to another node in

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said system [col. 1, par. 0023, col. 2, par. 0049, and col. 3, claim 3];

In addition, Robb explicitly teaches:

- An application infrastructure platform (AIP) having an application service provider (ASP) environment including multiple ASP systems providing application services to customers, and a common services environment including hardware and software and management systems [abstract, col. 13, par. 0138-0139], comprising:
 - initiating a failover action when said memory threshold is reached so that processing is shifted to another node in said system [col. 11, par. 0128, col. 12, par. 0138].

As per claims 3-4:

Trotter further teaches:

- setting a rate of memory consumption [col. 3, claim 1].
- selecting a time interval within which said selected rate of memory consumption will operate [col. 3, par. 0054].

Trotter does not explicitly address:

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- a select choice of low, medium high, or super high levels of memory consumption and an MPEG digital stream of data from a movie.

However, Trotter does disclose capability of:

- determining memory footprint of the system that has reached a pre-determined level [col. 3, claim 1] and determining which users over-consuming memory utilization [col. 1, par. 0004-0005] via setting memory threshold value to its memory consumption [col. 3, par. 0055] as well as the resource limitation setting in sizes in supporting the JVM policies changes [col. 3, par. 0057].

In addition, Robb explicitly teaches:

- An application infrastructure platform (AIP) having an application service provider (ASP) environment including multiple ASP systems providing application services to customers, and a common services environment including hardware and software and management systems [abstract, col. 13, par. 0138-0139]. comprising:

- application running on demand in supporting the managing of over consuming resources such as RAM memory [col. 13, par. 0138] via its quality of service (QoS) levels, work

flow management (WFM), and the service level agreement (SLA) [col. 21, claims 27-28 and 36] including the multimedia/video functionality [col. 6, par. 0076 and col. 13, par. 0142].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to realize the combining of Trotter's determining memory footprint of the system that has reached a pre-determined level, determining which users over-consuming memory utilization via setting memory threshold value to its memory consumption as well as the resource limitation setting in sizes in supporting the JVM policies changes and Robb's application running on demand in supporting the managing of over consuming resources such as RAM memory via its quality of service (QoS) levels, work flow management (WFM), and the service level agreement (SLA) including the multimedia/video functionality do teach applicant's select choice of low, medium high, or super high levels of memory consumption and an MPEG digital stream of data from a movie limitation. This is because both Trotter and Robb explicitly applied the memory consumption levels therein in ensuring the computer applications utilizing its allocated memory properly. Furthermore, the combination of Trotter and

Robb's capabilities do also applied the multimedia (data, voice, and video functions) stream of data within the memory resource management system to enhance and to control its memory consumption process.

This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so to improve the memory operation system availability and network/system performance process.

As per claim 5, 10, and 13-14:

Trotter substantially teach the invention. Trotter teaches:

- A system for determining the moment of failover from a stalled node to another operating node (i.e., multiple computer users) [abstract, col. 1, par. 0004-0005, 0009, and 0023, col. 2, par. 0049, and col. 3, claim 3] comprising:
 - means to select the rate of memory consumption per a selected unit time [col. 3, claim 1];
 - means to recognize a threshold value of memory loading which matches the limitations of the shared memory resouces [col. 3, par. 0054 and claim 1].

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- means to initiate a failover of processing operations to an auxiliary node of processors [col. 2, par. 0049].

Trotter does not explicitly address:

- a load balance and a soaking application.

However, Trotter does disclose capability of:

- A method for managing memory resources in a shared memory system having a plurality of users and memory footprint

[abstract, col. 3, claim 1 comprising capability of:

- determining memory footprint of the system that has

reached a pre-determined level [col. 3, claim 1] as well as

determining which users over-consuming memory utilization

[col. 1, par. 0004-0005] via setting memory threshold value

to its memory consumption [col. 3, par. 0055].

In addition, Robb explicitly teaches:

- An application infrastructure platform (AIP) having an application service provider (ASP) environment including multiple ASP systems providing application services to customers, and a common services environment including hardware and software and management systems [abstract, col. 13, par. 0138-0139]. comprising:

- application running on demand in supporting the managing of over consuming resources such as RAM memory [col. 13, par. 0138] as well as its load balance networking process [col. 12, par. 103 and 138].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to first realizing Trotter's determining memory footprint of the system that has reached a pre-determined level as well as determining which users over-consuming memory utilization via setting memory threshold value to its memory consumption as being the soaking application as claimed by Applicant. This is because Trotter's memory resource management explicitly performed the managing of memory reading, writing, monitoring, detecting, executing, and control via its threshold processes. By utilizing these capabilities, the memory within the computing memory system, more specifically the RAM, can ensure computer applications utilizing memory resources properly based upon its pre-determining set rate; second, by applying application running on demand in supporting the managing of over consuming resources such as RAM memory as well as its LOAD BALANCE NETWORKING process as taught by Robb in conjunction with the method for managing memory resources in a shared memory system

having a plurality of users and memory footprint as taught by Trotter, the memory system can enhance its operation performance, more specifically to ensuring each application within the computer system performing its data within its allocated memory in proper and efficient manner via its memory threshold control process

This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so to improve the memory operation system availability and network/system performance therein with a mechanism to enhance the data transmission (i.e., receiving and transmitting), data debugging, data mirroring, data reliability, data displaying, and data throughput which eventually will increase its performance, such as data throughput between internal and external devices including the logical and physical block addresses from a disk controller as well as a memory controller.

As per claims 6-8 and 11-12:

Trotter further teaches:

- setting a rate of memory consumption [col. 3, claim 1].
- selecting a time interval within which said selected rate of memory consumption will operate [col. 3, par. 0054];

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- means to pause (stopped, stalled) [col. 1, par. 0013-0014, col. 4, claim 5].

Trotter does not explicitly address:

- selection means for choosing loading speed rates of low, medium high, or super high levels (3000bytes/second, ... 50 mil bytes per second) of memory consumption and an MPEG digital stream of data.

However, Trotter does disclose capability of:

- determining memory footprint of the system that has reached a pre-determined level [col. 3, claim 1] and determining which users over-consuming memory utilization [col. 1, par. 0004-0005] via setting memory threshold value to its memory consumption [col. 3, par. 0055] as well as the resource limitation setting in sizes in supporting the JVM policies changes [col. 3, par. 0057].

In addition, Robb explicitly teaches:

- An application infrastructure platform (AIP) having an application service provider (ASP) environment including multiple ASP systems providing application services to customers, and a common services environment including

hardware and software and management systems [abstract, col. 13, par. 0138-0139]. comprising:

- application running on demand in supporting the managing of over consuming resources such as RAM memory [col. 13, par. 0138] via its quality of service (QoS) levels, work flow management (WFM), and the service level agreement (SLA) [col. 21, claims 27-28 and 36] including the multimedia/video functionality [col. 6, par. 0076 and col. 13, par. 0142].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to realize the combining of Trotter's determining memory footprint of the system that has reached a pre-determined level, determining which users over-consuming memory utilization via setting memory threshold value to its memory consumption as well as the resource limitation setting in sizes in supporting the JVM policies changes and Robb's application running on demand in supporting the managing of over consuming resources such as RAM memory via its quality of service (QoS) levels, work flow management (WFM), and the service level agreement (SLA) including the multimedia/video functionality do teach applicant's selection means for choosing loading speed rates of

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low, medium high, or super high levels (3000bytes/second, ... 50 mil bytes per second) of memory consumption and an MPEG digital stream of data limitation. This is because both Trotter and Robb explicitly applied the memory consumption levels therein in ensuring the computer applications utilizing its allocated memory properly. Furthermore, the combination of Trotter and Robb's capabilities do also applied the multimedia (data, voice, and video functions) stream of data within the memory resource management system to enhance and to control its memory consumption process.

This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so to improve the memory operation system availability and network/system performance process.

As per claim 9:

Trotter further teaches:

- means to customize the value of the memory consumption per second according to the selected choice of the user [col. 1, par. 0023, col. 2, par. 0049, and col. 3, claims 1 and 3];
- An application infrastructure platform (AIP) having an application service provider (ASP) environment including

multiple ASP systems providing application services to customers, and a common services environment including hardware and software and management systems [abstract, col. 13, par. 0138-0139]. comprising:

- initiating a failover action when said memory threshold is reached so that processing is shifted to another node in said system [col. 11, par. 0128, col. 12, par. 0138].

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. A shortened statutory period for response to this action is set to expired THREE (3) months, ZERO days from the date of this letter. Failure to respond within the period for response will cause the application to be abandoned. 35 U.S.C. 133.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dieu-Minh Le whose telephone number is (571) 272-3660. The examiner can normally be reached on Monday - Thursday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Baderman can be reached on (571)272-3644. The Tech Center 2100 phone number is (571) 272-2100.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**DIEU-MINH THAI LE
PRIMARY EXAMINER
ART UNIT 2114**

DML
11/14/06